INPUT WEIGHTING OPTIMIZATION FOR PID CONTROLLERS BASED ON THE ADAPTIVE TABU SEARCH

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ABSTRACT

Eitelberg introduced a useful method to recover system performance when a direct tuning of the PID's parameters was prohibited in 1987 [1]. Our work herein proposes the use of adaptive tabu search (ATS) [11] to optimally tune the input-weight factors according to Eitelberg's. We illustrate the effectiveness of our proposed method via two motor control problems.